



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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**BENEFICIAL USE DETERMINATION – BWP SW 40
CITY OF BEVERLY**

**Beneficial Use of Catch Basin Cleanings and Street Sweepings as Alternative Daily Cover Material
and/or Grading and Shaping Material
Transmittal # X224394**

CERTIFIED MAIL

December 16, 2008

Applicant Name: City of Beverly
Mailing Address: 191 Cabot Street
Beverly, MA 01915

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(978)921-6000

DEP Office: Department of Environmental Protection
(the "Department" or "MassDEP")
Business Compliance Division
One Winter Street
Boston, Massachusetts 02108

Transmittal No.: X224394

I. PERMIT APPLICATION INFORMATION

- A. Applicant Information for Beneficial Use Determination – BWP SW 40
- | | |
|--------------------------|---|
| BUD Category: | BWP SW 40 – Regulated Systems |
| Applicant Name: | City of Beverly |
| Transmittal No.: | X224394 |
| Date: | October 16, 2008 |
| Application Prepared By: | Alliance Environmental Group, Inc.
Phone: (617) 492-6500 |

Type of Submittal: BWP SW 40 -- Beneficial Use Determination --
Regulated Systems -- Catch Basin Cleanings and Street
Sweepings Material for Landfill Daily Cover and Pre-
Capping Contouring

II. BENEFICIAL USE PROPOSAL

The Town of Beverly Department of Public Works (Beverly DPW) generates about 1000 cubic yards of combined catch basin cleanings and street sweepings (CBC/SS) annually. The CBC are composed primarily of sand and dirt that settles out of stormwater that has entered stormwater (no sanitary component) catch basins. The CBC also contain incidental materials, such as litter and leaves that have collected in the catch basins. Routine maintenance requires periodic removal of these accumulated solids. The SS consist mainly of sandy material generated from cleaning Beverly's streets.

Analytical results of the CBC/SS material document that the material has low levels of chemical contamination, consistent with the levels of contamination of other materials approved by MassDEP for the same purposes proposed by the Beverly DPW. This CBC/SS material has been classified as "SW" sandy soil composed of well-graded, fine to coarse sand, with very low organic content (below six (6) percent).

The Beverly DPW proposes to beneficially use the CBC/SS material as alternative daily cover material (ADCM) and/or pre-capping contouring (grading and shaping material, or G&S) at one or more permitted solid waste landfills within the jurisdiction of the Commonwealth of Massachusetts.

The use of CBC/SS as ADCM or G&S obviates the need and use of clean imported soil, which is more expensive than using virgin/clean material.

III. BENEFICIAL USE DETERMINATION

This application complies with the requirements of 310 CMR 19.000, "Solid Waste Management Facility Regulations," and was reviewed in accordance with section 19.060, Beneficial Use of Solid Wastes. MassDEP determines that the city of Beverly may beneficially use CBC/SS collected and stored by the Beverly DPW for ADCM or G&S at any permitted lined or unlined solid waste landfill within the Commonwealth.

IV. GENERAL PERMIT CONDITIONS

- A. A determination of beneficial use means that the material is NOT classified as a solid waste ONLY when used in accordance with the requirements of this determination. The material shall not be handled or utilized in a manner that will result in the material becoming a solid waste.
- B. The beneficial use of SS/CBC shall be in compliance with other applicable state and federal laws and regulations.
- C. MassDEP reserves the right to enter the Beverly DPW facility for inspectional purposes. The inspection may include the sampling of CBC/SS.

- D. This permit applies only to CBC/SS material generated and collected in the city of Beverly, and only by the Beverly DPW.
- E. MassDEP reserves the right to rescind, suspend or modify this permit by the imposition of additional conditions based upon a determination of actual, or threat of, adverse impacts from the use of this material.
- F. Beverly shall provide MassDEP, within seven (7) days or an alternative period prescribed in writing by MassDEP, any information which MassDEP may request and which is deemed by MassDEP to be relevant in determining whether cause exists to modify, revoke, or suspend this Beneficial Use Determination (BUD), or to determine whether the Beverly DPW is complying with the terms and conditions of the permit.
- G. *Personnel Training.* Beverly DPW shall instruct or give on-the-job training to personnel involved in any activity authorized by the permit. Such instruction or on-the-job training shall teach personnel how to comply with the conditions of the permit and to carry out the authorized activity in a manner that is not hazardous to public health, safety, welfare or the environment.
- H. Failure to comply with this determination shall be grounds for enforcement action, including, without limitation, permit suspension and modification.
- I. Beverly DPW must notify MassDEP in writing of any changes in its process that may modify the physical or chemical nature of the material. A change in processing or use of the materials as presented in the beneficial use determination application will require additional review and approval by MassDEP.
- J. A copy of this permit shall be supplied to any landfill which intends to use CBC/SS as ADCM and/or G&S. Beverly DPW shall obtain a signature from the landfill operator indicating that the landfill operator has received a copy of the permit, and is aware of the permit conditions that relate to landfill requirements.
- K. Should it be determined that the CBC/SS is ineffective for its intended use at any time, the use of the material shall cease, and standard material shall be used. MassDEP shall be notified by telephone and/or in writing should this occur.
- L. *Transfer of Permits.* Pursuant to 310 CMR 19.044, for a transferred permit to remain effective, written proof that the transfer has been completed must be provided to MassDEP within 30 days of the effective date of the transfer. If the transfer involves conveyance of real estate, written proof that such conveyance has been duly recorded in the appropriate Registry of Deeds or land court must be provided.

V. CATCH BASIN CLEANINGS AND STREET SWEEPINGS CONDITIONS

- A. Beverly DPW shall ensure that the handling and transportation of the CBC/SS will not create nuisance conditions such as odors and dust. Beverly DPW proposes to condition the material with mist prior to loading it into dump trailers, and delivering it to the landfill(s). However, the material shall not contain free-draining water that

can escape from the conveyance during transport. During transport, all loads must be covered to prevent releases of dust and/or material.

- B. *Chemical Characterization.* All characterizations shall be performed on representative samples of the CBC/SS material. A qualified environmental professional shall perform all sampling using approved ASTM or other recognized sampling methods. Samples must be sent via chain-of-custody to a certified lab or analyzed under alternative methods approved in writing by MassDEP. Beverly DPW shall obtain chemical characterization information at the frequency of one composite sample per every five hundred (500) cubic yards CBC/SS collected. Each composite sample shall be composed of no fewer than four (4) aliquots obtained from different points in a stockpile prior to being combined. Beverly DPW shall have the CBC/SS tested for all parameters listed in Table 1, which can be found at the end of this document. Where the total concentration of any metal is greater than twenty (20) times the toxicity characteristic rule standard (Table 1 of 310 CMR 30.125), a Toxicity Characteristic Leaching Procedure (TCLP) analysis shall be performed. If the results of any analysis exceed values in Table 1 (including any exceedances of a TCLP standard), Beverly DPW shall notify MassDEP within thirty (30) days of the known result, before transporting the CBC/SS material to any landfill.
- C. CBC/SS shall not contain more than ten percent (10%) litter, leaves or other non-soil waste materials. The Beverly DPW shall screen CBC/SS, as needed, to ensure this requirement is being met.
- D. The Beverly DPW shall ensure that all CBC/SS will be covered and otherwise properly stored at the Beverly DPW yard to prevent erosion, contaminated storm water runoff or nuisance conditions such as dust or odor.
- E. CBC/SS shall not be stored at the Beverly DPW for more than 180 days.

VI. LANDFILL CONDITIONS – USE AS ALTERNATIVE DAILY COVER

- A. The landfill operator shall immediately take appropriate steps to abate any nuisance condition(s) including, but not limited to, dust and odor resulting from activities associated with the use of CBC/SS as ADCM.
- B. The landfill operator shall notify the appropriate Regional office of MassDEP at least thirty (30) days prior to its intended use of Beverly CBC/SS as ADCM.
- C. The daily quantity of CBC/SS, in combination with all other materials used as daily cover, that may be used at a landfill shall not exceed the quantity necessary to meet performance standards for daily cover specified in 310CMR 19.130 (15). A quantity in excess of this amount may be considered disposal. Furthermore, daily cover is generally limited to a quantity no greater than twenty (20) percent by weight of the amount of waste disposed that day. Daily cover materials above this percentage may be considered disposal.
- D. A minimum quantity of daily cover material, other than CBC/SS, sufficient for nine (9) working days of operation shall be stockpiled at the landfill or shall be readily available.

- E. Landfills using CBC/SS generated by Beverly DPW shall not stockpile more CBC/SS than can reasonably be used as ADCM in a five (5) day period. Stockpiled CBC/SS shall be properly controlled to prevent runoff and nuisance conditions.
- F. Any landfill using CBC/SS shall keep accurate records of the amount of material used as ADCM. The amount of CBC/SS, soil and all other cover materials shall be reported in the landfill's annual report.
- G. MassDEP shall be notified as soon as possible, but no later than twenty-four (24) hours, should conditions of nuisance odor occur at the site as a result of the beneficial use activities.

VII. LANDFILL CONDITIONS – USE AS GRADING AND SHAPING MATERIAL

- A. Beverly CBC/SS shall be used as G&S only if the landfill owner/operator applies for and receives approval from the appropriate Regional Office of MassDEP for its use as part of an approved closure plan for that facility.
- B. A copy of this permit and the application for modification of the closure plan as required in VII.A. above shall be supplied to the Board of Health in the town where the landfill closure is taking place.
- C. CBC/SS shall be mixed with other approved G&S at a ratio of at least 1:1 (one part CBC/SS with at least one part other approved G&S), by volume, when placed during closure activity.
- D. The regional MassDEP Office approval shall address site specific issues including, but not limited to, storage requirements (amounts and locations), quantity of material to be used, spreading and compacting requirements, length of time before exposed material is covered by other materials, amount of area that will have exposed CBC/SS, erosion and storm water controls and dust and other nuisance control methods.
- E. CBC/SS used as grading and shaping material shall be used in accordance with standard operating procedures addressing record keeping, landfill operation practices and erosion control as stated below, or as those requirements may be modified by the regional approval required in VII.A. above.
- F. *Landfill Operating Practices.* All CBC/SS shall be stockpiled within the landfill footprint. The landfill shall not stockpile more material than can be spread in a five (5) day period. Stockpiled CBC/SS shall be properly controlled to prevent runoff and nuisance conditions. All CBC/SS shall be spread and compacted as soon as possible following receipt of the material. The material shall be placed in lifts not exceeding eighteen (18) inches and be compacted by a minimum of three (3) passes of landfill compaction equipment having a minimum equipment weight of twenty (20) tons. All CBC/SS shall be covered with soil or other approved materials within seven (7) days, unless another lift of CBC/SS is placed within that time period.
- G. *Erosion Control.* Erosion controls, consisting of hay bales and silt fencing, shall be installed within areas receiving CBC/SS for grading and shaping to prevent migration

of the material. In addition, hay bales and silt fencing shall be installed around all material stockpiles on site. Following placement, all material shall be graded to minimize erosion. Inspection of erosion control measures shall be performed on a regular basis and maintenance performed on an as needed basis. Dust control on the site shall consist of regular maintenance of access and service roadways to minimize dust generation. In the event of nuisance dust generation from areas of the site receiving CBC/SS material, a six (6) inch layer of daily cover material shall be placed over the areas to minimize generation of dust.

- H. The allowable amount of CBC/SS material that shall be used as grading and shaping material at a site shall be limited to that quantity necessary for grading and shaping to achieve pre-capping contours as specified in the facility's approved final closure plan. Placement of CBC/SS in excess of what is needed to meet closure requirements shall be considered disposal and does not constitute beneficial use. MassDEP may initiate enforcement actions, including notices of noncompliance, orders or penalties, and require removal of CBC/SS that is placed in violation of a valid approval.
- I. Any landfill using CBC/SS shall keep accurate records of the amount of CBC/SS used as G&S. The amount of CBC/SS, soil and all other G&Ss shall be reported in that landfill's annual report.
- J. MassDEP shall be notified as soon as possible, but no later than twenty-four (24) hours, should conditions of nuisance odor occur at the site as a result of the Beneficial Use activities.

VIII. RECORD KEEPING AND REPORTING

- A. Beverly DPW shall retain all records and copies of applications, reports, and other documents required by this BUD. These documents shall be readily available for inspection by MassDEP, for a period of three (3) years beyond the final distribution of Beverly CBC/SS as ADCM or G&S.
- B. All CBC/SS shipped for use as ADCM or G&S shall be transported with a material shipping record detailing, at a minimum, the generating entity (the city of Beverly), receiving facility, date of shipment, date received, truck identification and tonnage. The shipping and receiving facilities shall each maintain copies of the shipping record.
- C. Records retained shall include, but are not limited to, the following:
 - 1. Training; and,
 - 2. Daily records, including:
 - a. Tons of each shipment of CBC/SS and its use (ADCM or G&S) and
 - b. CBC/SS shipping dates and receiving dates by any Commonwealth landfill.
- D. *Summary Reporting.* The applicant shall provide an annual summary, in tabular form, of the results of chemical characterization testing required by this BUD. Also included in the summary shall be the amounts of CBC/SS used as ADCM or G&S at

any landfill. The summary shall be submitted to the DEP's Boston Office, Business Compliance Division, Waste Branch Chief by February 15 of each calendar year.

IX. RIGHT OF APPEAL

Any person aggrieved by the issuance or denial of this permit decision except as provided for under 310 CMR 19.037(4)(b), may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, § 150A and c. 30A not later than 30 days following the receipt of the final permit. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the permit by a court of competent jurisdiction, the permit decision shall remain effective or become effective at the conclusion of the 30 day period.

Notice of Appeal. Any aggrieved person intending to appeal a grant or denial of a permit to the Superior Court shall first provide notice of intention to commence such action. Said notice of intention shall include MassDEP file number and shall identify with particularity the issues and reason why it is believed the permit decision was not proper. Such notice shall be provided to the Office of General Counsel of MassDEP and the Deputy Division Director of the Business Compliance Division at least five days before the filing of an appeal.

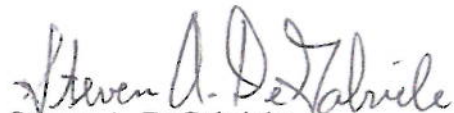
Office of General Counsel
Department of Environmental Protection
One Winter Street-Third floor
Boston, MA 02108

Deputy Division Director
Department of Environmental Protection
Business Compliance Division
One Winter Street
Boston, MA 02108

No allegation shall be made in any judicial appeal of a permit decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in these regulations, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

If you have any questions regarding this matter, please contact Mark Goldstein of the Business Compliance Division at (617) 292-5987.

Very truly yours,



Steven A. DeGabriele

Director

Business Compliance Division

Bureau of Waste Prevention

12/14/08
Date

CC: Solid Waste Section Chiefs:

John Regan CERO

Dave Ellis SERO

John Carrigan NERO

Daniel Hall WERO

TABLE 1
CONTAMINANT CEILING LEVELS FOR BEVERLY CBC/SS REUSE AT LANDFILLS

CONTAMINANT	Reuse Levels (mg/kg) ^a	
	Lined Landfills	Unlined Landfill
Total Arsenic	40	40
Total Cadmium	80	30
Total Chromium	1,000	1,000
Total Lead	2,000	1,000
Total Mercury	10	10
Total Petroleum Hydrocarbons (TPH)	5,000	2,500
Total PCBs ^b	< 2	< 2
Total SVOCs ^c	100	100
Total VOCs ^d	10	10
Conductivity ^e (umhos/cm)	8,000 umhos/cm	4,000 umhos/cm
Listed or Characteristic Hazardous Waste (TCLP) ^f	NONE	NONE

TABLE 1 NOTES:

- a. The reuse levels are expressed as total levels in mg/kg and apply to reuse of soil as daily cover (ADCM) and/or pre-capping contour material (G&S) at lined landfills and unlined landfills as described in this Policy.
- b. Total concentrations of polychlorinated biphenyls EPA Method 8080.
- c. Total concentrations of compounds listed in EPA Method 8270.
- d. Total concentration of compounds listed in EPA Method 8260.
- e. For soil which may be expected to contain elevated NaCl.
- f. TCLP testing shall be performed for metals or organic compounds when the total concentrations in the soil are above the theoretical levels at which the TCLP criteria may be exceeded. For guidance parties shall consult United States Environmental Protection Agency, Memorandum #36, "Notes on RCRA Methods and QA Activities", pp. 19-21, Gail Hanson, January 12, 1993.

